ARTICLES

A REVISED DISTRIBUTION RECORD OF MASTICOPHIS IN KANSAS

A specimen in the Sternberg Museum of Natural History at Fort Hays State University, Hays, Kansas (MHP 9680) bears the specific identification Masticophis flagellum and locality of Miami County, Kansas. This record represented a range extension northward for the species in Kansas (Taggart et al., 2005) and has been the subject of much debate. The material associated with this identification is a fragmentary piece of shed skin from which it is difficult to make a positive identification. Given the similarity in scalation between the Coachwhip (M. flagellum) and the Eastern Racer (Coluber constrictor), the latter of which is known to occur statewide (Collins and Collins, 1993), it was uncertain whether MHP 9680 was a specimen of M. flagellum. Using Qiagen DNEasy DNA extraction kits (Qiagen USA), total genomic DNA was isolated from a small section of the shed skin of MHP 9680. A 428bp segment of the mitochondrial cytochrome b gene was amplified using the primers L14910 (Burbrink et al., 2000) and ColSeq1R (Burbrink et al., in press) and sequenced using ColSeq1R. The sequence is identical with AF337098 (a specimen of C. constrictor). The sequence was included in a rangewide dataset for C. constrictor from Burbrink et al. (in press) and a phylogenetic tree was constructed in PAUP* v4.10b using the BioNJ neighbor joining algorithm. The results of this analysis placed MHP 9680 in the Central clade of C. constrictor (Burbrink et al., in press) with 100% bootstrap support (Figure 1). These analyses suggest that MHP 9680 is not M. flagellum, but C. constrictor and that it does not represent a range extension for *Masticophis* in Kansas.

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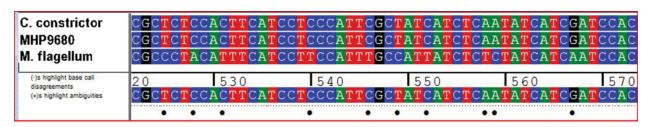


Figure 1. A DNA comparison of MHP 9680 with an Eastern Racer (*Coluber constrictor* AF 337098) and a Coachwhip (*Masticophis flagellum* AY 486927).

